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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,959	01/14/2002	Tim Forrester	UTL 00082	4413
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			EXAMINER	
			MULL, FRED H	
			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SWS

<b>Office Action Summary</b>	<b>Applicant No.</b>	<b>Candidate(s)</b>
	10/046,959	FORRESTER, TIM
	Examiner Fred H. Mull	Art Unit 3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 15 September 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1,3-5,9 and 11-40 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,3-5,9 and 11-40 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

***Drawings***

1. The drawing corrections sheets submitted have been objected to by the Draftsperson. See the attached Notice of Draftsperson's Patent Drawing Review.

***Claim Objections***

2. Claims 20 and 30 are objected to because of the following informalities:

In line 2 of each, "configure" should be --configured--.

Claims 21 and 31 are objected to because of the following informalities:

In line 3 of each, "configure" should be --configured--.

In line 4 of each, "connected" should be --connect--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 23 and 33 recites the limitation "the other wireless communication transceiver" in line 5 of each. There is insufficient antecedent basis for this limitation in the claim or its parent claims.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3, 9, 11, and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Garin.

In regard to claim 40, Garin discloses a wireless communication transceiver configured to allow the wireless communication device (200, Fig. 2; col. 2, lines 45-57; col. 5, lines 13-17) to interface with a wireless communication network; and a GPS receiver (202) configured to receive GPS signals, the wireless communication device configured to act as a standalone GPS receiver or to act as a network assisted GPS receiver when it is determined that network assistance is available from the wireless communication network (col. 9, lines 4-9).

In regard to claims 1 and 9, Garin further discloses a processor coupled with the GPS and wireless communication receivers (col. 5, lines 34-36), the processor configured to fully process the wireless communication signals (col. 5, lines 13-17) and GPS signals (col. 6, lines 33-43).

In regard to claims 3 and 11, Garin further discloses the processor is further configured to process network assist information related to the received GPS signals and to determine a position of the wireless communication device based at least in part on the processed network assist information (col. 6, line 55 to col. 7, line 32).

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5. Claims 1, 3, 9, 11, and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsujimoto.

In regard to claim 40, Tsujimoto discloses a wireless communication transceiver configured to allow the wireless communication device to interface with a wireless communication network; and a GPS receiver configured to receive GPS signals, (col. 2, lines 4-7), the wireless communication device configured to act as a standalone GPS receiver or to act as a network assisted GPS receiver when it is determined that network assistance is available from the wireless communication network (col. 5, lines 13-19).

Tsujimoto also discloses a request for position information. 35 USC 103 rejections are not being made in view of Tsujimoto at this time, since Garin has been chosen to be the main rejection. However, it should be understood that the fact that those rejections have not been made does not imply that they cannot be made if applicant's response gets around Garin but is not unobvious in view of Tsujimoto.

In regard to claims 1 and 9, Tsujimoto further discloses a processor coupled with the GPS and wireless communication receivers, the processor configured to fully process the wireless communication signals and GPS signals (310, Fig. 3; col. 4, lines 21-23).

In regard to claims 3 and 11, Tsujimoto further discloses the processor is further configured to process network assist information related to the received GPS signals and to determine a position of the wireless communication device based at least in part on the processed network assist information (col. 5, lines 26-45).

***Claim Rejections - 35 USC § 103***

6. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garin.

In regard to claims 14 and 17, Garin discloses receiving a request for position information, activating the GPS receiver, receiving the GPS signals, and determining the position of the device (col. 9, lines 25-28), where dialing 911 includes requesting position to send to the emergency call center. Throughout the disclosure, Garin describes a device that does not determine position regularly, but in specific circumstances, like a 911 call or when a user would like directions to a location. When a user chooses to call 911, request directions, etc., these all involve a request for position, as opposed to a device that regularly determines position so that it is available when it is wanted.

Garin further discloses the device configured to act as a standalone GPS receiver or to act as a network assisted GPS receiver when it is determined that network assistance is available from the wireless communication network (col. 9, lines 4-9).

Garin further discloses disabling the wireless receiver link before the GPS receiver is activated if assistance data has already been received (col. 9, lines 13-17). Garin fails to suggest disabling the wireless receiver once assistance data has been determined to not be present.

Garin suggests disabling components that are not in use in the case of the wireless receiver when not needed because assistance data is already available (col. 9, lines 13-17) and in the case when the GPS receiver is not in use (col. 10, lines 21-23).

It is well known in the art to disable components of a mobile wireless device that are not in use in order to save the limited power that can be stored in the device's battery. While Garin does not take the further step of disabling the wireless receiver when no assistance data is

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available, one or ordinary skill in the art would recognize from Garin's teaching or disabling it when assistance data is needed because it is already available that the essence of the teaching is to disable the wireless receiver when it is not being used. When no assistance information is available, the wireless receiver is not being used. It follows so naturally from what Garin has said and is so common sense to one of ordinary skill in the art to disable the wireless receiver when no assistance data is available that Garin does not even think to put it into words.

In regard to claims 15 and 18, Gain further discloses processing network assist information related to received GPS signals; and determining a position of the device based at least in part on the processed network information (col. 6, line 55 to col. 6, line 22).

In regard to claims 16 and 19, it is well known to load instructions into an electronic device memory from storage when the device is powered up.

7. Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garin in view of Syrjarinne.

In regard to claims 14 and 17, Garin discloses receiving a request for position information, activating the GPS receiver, receiving the GPS signals, and determining the position of the device (col. 9, lines 25-28), where dialing 911 includes requesting position to send to the emergency call center. Throughout the disclosure, Garin describes a device that does not determine position regularly, but in specific circumstances, like a 911 call or when a user would like directions to a location. When a user chooses to call 911, request directions, etc., these all involve a request for position, as opposed to a device that regularly determines position so that it is available when it is wanted.

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Garin further discloses the device configured to act as a standalone GPS receiver or to act as a network assisted GPS receiver when it is determined that network assistance is available from the wireless communication network (col. 9, lines 4-9).

Garin further discloses disabling the wireless receiver link before the GPS receiver is activated if assistance data has already been received (col. 9, lines 13-17). Garin fails to suggest disabling the wireless receiver once assistance data has been determined to not be present.

Garin suggests disabling components that are not in use in the case of the wireless receiver when not needed because assistance data is already available (col. 9, lines 13-17) and in the case when the GPS receiver is not in use (col. 10, lines 21-23).

Syrjarinne teaches disabling components of a mobile wireless device when they are not in use in order to save battery power (paragraph 13-14).

Based on Garin's disclosure of power savings, one of ordinary skill in the art would look to other known power savings means/methods, and would be lead to Syrjarinne, who teaching generally to disable components of a mobile wireless device that are not in use. Since, when it has been determined that assistance data is unavailable, the wireless receiver is not in use, it would have been obvious to disable it until it needs to be used.

In regard to claims 15 and 18, Gain further discloses processing network assist information related to received GPS signals; and determining a position of the device based at least in part on the processed network information (col. 6, line 55 to col. 6, line 22).

In regard to claims 16 and 19, it is well known to load instructions into an electronic device memory from storage when the device is powered up.

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8. Claims 4-5, 12-13, 28, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garin as applied to claim 1 in view of Krasner '363, previously cited.

In regard to claims 4 and 12, Garin discloses that: "the CP section and the GPS section can share the same digital processor and other circuitry." (col. 5, lines 34-36). While Garin does not specify what this other circuitry that is shared is, Krasner '363 discloses a single antenna coupled with a GPS receiver and a wireless communication receiver (col. 2, lines 21-25). It would have been obvious to use the known combined GPS/wireless communication antenna of Krasner '363 as shared circuitry in Garin, as motivated by Garin's statement quoted above.

In regard to claim 5 and 13, Krasner '363 further discloses a common demodulation circuit configured to demodulate both the received GPS signals and the received wireless communication signals (col. 2, lines 46-51). It would have been obvious to use the known combined GPS/wireless communication demodulator of Krasner '363 as shared circuitry in Garin, as motivated by Garin's statement quoted above.

In regard to claims 28 and 38, Krasner '363 further discloses a dual band local oscillator coupled with the common demodulator, wherein the local oscillator is capable of generate the correct frequency depending on whether the GPS receiver or the wireless communication receiver is coupled with the common demodulator (col. 5, lines 9-21). A VCO is a well known local oscillator.

9. Claims 20-22, 24-27, 29, 30-32, 34-37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garin and Krasner '363 as applied to claims 4-5 and 12-13 in view further of Leisten.

In regard to claims 24 and 34, Garin discloses that: "the CP section and the GPS section can share the same digital processor and other circuitry." (col. 5, lines 34-36). While Garin does not specify what this other circuitry that is shared is, Leisten discloses an integrated GPS/wireless communication receiver with shared circuitry (Fig. 8). It would have been obvious to use the known shared GPS/wireless communication circuitry of Leisten as shared circuitry in Garin, as motivated by Garin's statement quoted above.

Leisten further discloses that the shared circuitry includes a diplexer (2', Fig. 8) configured to couple an antenna to a GPS receiver (4') when receiving GPS signals and to a wireless communication receiver (5') when receiving wireless communication signals (p. 6, line 22 to p. 7, line 15).

In regard to claims 20 and 30, one of ordinary skill in the art would recognize that a switching module that connects an input port to one of two output ports is functionally equivalent to a diplexer.

In regard to claims 25 and 35, Leisten further discloses the device comprises two wireless communication transceivers, each configured to communicate wireless communication signals in a unique communication band (p. 6, lines 22-30 and p. 12, lines 9-11), where the latter citation refers to a dual-band cellular phone/GPS combination. While Leisten does not describe such an embodiment in any further detail, one of ordinary skill in the art would recognize the need to replace the diplexer with a triplexer to put the embodiment into practice.

In regard to claims 26 and 36, one of ordinary skill in the art would recognize that a switching module that connects an input port to one of three output ports is functionally equivalent to a triplexer.

In regard to claims 21-22 and 31-32, Leisten further discloses an antenna matching network configured to match the impedance of the GPS receiver with the antenna when the switching module is positioned to connect the GPS receiver with the antenna (p. 7, lines 1-5; p. 16, lines 5-7).

In regard to claims 27 and 37, Krasner '363 further discloses a switch configured to selectively couple the GPS receiver and the wireless communication receiver to the common antenna and demodulator (6, Fig. 1A).

In regard to claims 29 and 39, one of ordinary skill in the art would recognize that a diplexer is functionally equivalent to a switch that connects an input port to one of two output ports.

10. Claims 20-21, 23, 30-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garin and Krasner '363 as applied to claims 4 and 12, and further in view of Standke.

In regard to claims 20 and 30, Garin discloses that: "the CP section and the GPS section can share the same digital processor and other circuitry." (col. 5, lines 34-36). While Garin does not specify what this other circuitry that is shared is, Standke discloses an integrated GPS/wireless communication receiver with shared circuitry (Fig. 2). It would have been obvious

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to use the known shared GPS/wireless communication circuitry of Standke as shared circuitry in Garin, as motivated by Garin's statement quoted above.

Standke further discloses a switching module configured to couple the antenna to the GPS receiver when receiving GPS signals and to the wireless communication receiver when receiving wireless communication signals (15, Fig. 2).

In regard to claims 21 and 31, Standke further discloses an antenna matching network configured to match the impedance of the GPS receiver with the antenna when the switching module is positioned to connect the GPS receiver with the antenna (paragraph 8 and 30).

In regard to claims 23 and 33, Standke further discloses the device further discloses a diplexer (17).

11. The examiner also finds the following reference(s) relevant:

Greenspan, which teaches a diplexer and a one input two output switch as being functionally equivalent (43, Fig. 2).

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.

### ***Conclusion***

12. Since there is a new rejection of at least one claim that was not amended, this action will be another Final Action rather than an Advisory Action. All previous rejections are removed and replaced by the rejections in this action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 703-305-1250. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 703-360-4171. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Fred H. Mull  
Examiner  
Art Unit 3662

fhm



THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
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